

From: "Stefanoff, Jim/SPK" <jstefano@CH2M.com>
 To: "Voytilla, Mary Kay/EPA" <voytilla.marykay@epamail...>
 Date: 10/30/98 11:16am
 Subject: FW: CIA Sludge Drying Beds

-----Original Message-----

From: Dawson, Karen/SEA
 Sent: Friday, October 30, 1998 10:51 AM
 To: Stefanoff, Jim/SPK; Osterhaug, Brenda/SEA
 Cc: Parton, Frances/SPK
 Subject: RE: CIA Sludge Drying Beds

148017



I'll see if I can respond to your two (?) questions.

1.) Can the drying beds be built on the old sludge ponds? Yes, but there is greater risk of differential settlement than if they were built north of the ponds or east of the ponds. If differential settlement occurs, you face the danger of eventually tearing through your liner as you clean out the sludge every other year. To compensate for the risk of differential settlement, we could make more separation between the pond and the CIA liner, or (better still) make a thicker sacrificial layer of sand on top of the drying bed liner. In other words, instead of having 4 feet of sand, and every other year scraping away the top one foot and replacing it, have maybe 6 feet of sand. Maybe we could also rig up some sort of tell-tales across the lining so that settlement could be measured. Quality control to measure the depth of sand removed and the depth of sand replaced (instead of removing to some bottom elevation) would be very important. There may be additional engineering controls in the leak detection system that would alert us to a breach of the liner.

2.) Can the drying beds be built on the new sludge pond (old mine water pond)? It is less desirable to build the drying ponds on the new sludge pond if you wait 5 or 6 years until the pond is filled up with 10+ feet of new sludge than to build them on the old sludge ponds. The new sludge will be more compressible than the old sludge that has sat for several years and been loaded by the fill that MK has placed so far. If you could build the drying beds now (before the new sludge depth gets too large) in a portion of the mine water pond, it would be better than building them over the old sludge ponds, but worse than building them to the north or east of the ponds (because the mine water sediments are still more compressible than the tailings).

-----Original Message-----

From: Stefanoff, Jim/SPK
 Sent: Wednesday, October 28, 1998 10:29 AM
 To: Osterhaug, Brenda/SEA
 Cc: Dawson, Karen/SEA; Parton, Frances/SPK
 Subject: RE: CIA Sludge Drying Beds

We have about 2-3 feet of Arizona rock on the sludge ponds. Can we build on top of this? We are placing sludge into the Decant pond. It will be more squishy than the pre-loaded old sludge ponds? Could we dike off a 2-3 acre portion of the decant pond to keep new sludge out? This will reduce its

capacity from the current 5-6 years though. Jim.

-----Original Message-----

From: Osterhaug, Brenda/SEA
Sent: Wednesday, October 28, 1998 10:05 AM
To: Stefanoff, Jim/SPK
Subject: RE: CIA Sludge Drying Beds
Importance: High

Being we have already filled over the closed sludge ponds, how about the Decant Pond?? Karen has data from a settlement plan that was installed at that site.

Brenda

-----Original Message-----

From: Stefanoff, Jim/SPK
Sent: Wednesday, October 28, 1998 8:46 AM
To: Dawson, Karen/SEA
Cc: Osterhaug, Brenda/SEA; Parton, Frances/SPK;
Germon, Matt/SPK; Dehner, Jay/SPK
Subject: CIA Sludge Drying Beds

Hello Karen, what can be done to install the sludge drying beds in the southeast CIA corner over the top of the old sludge beds? Where we have proposed is in the middle of the CIA and likely not the best place if the State or the town wants to use the CIA for other uses. We plan on using a wide-track excavator to dig the sludge out, and we plan on a concrete driveway through the middle of the beds for the haul trucks - thus the loading should not be too high (the maximum sludge depth is 5 feet). This location would also be the closest to the CTP and the south side haul road. Thanks, Jim.